Simply more reliable

The high power induction motor comes of age

It’s the same frustrating story whenever high power industrial applications go down such as oil and gas compressors, steam turbines, large boiler feed pumps, CC_s, compressors and blast furnace blowers. The good news is that GE’s innovative high power induction motor technology now opens up exciting new possibilities for customers who need large, high-speed electric power units. And it does so at reliability levels that gas turbine and synchronous motors simply can’t match.

GE’s new high power induction motor is not just a good idea on a drawing board. It’s the here and now – and ready to deliver efficient, reliable power right across the 20MW to 100MW power range. We see high power induction as a game changer. One that’s set to shape the next decade as heavy industry switches to low maintenance, high reliability electric alternatives.

www.gepowerconversion.com

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To find out more about GE’s high power induction motor and integrated solutions contact:

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Tel: +55 31 3330 5800

China, Shanghai
Tel: +86 21 6108 2600

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Tel: +33 3 83 38 40 00

France, Massy Cedex
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Tel: +91 44 4968 0000

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Germany, Berlin
Tel: +49 30 7622 0

UAE, Dubai
Tel: +971 4 4296161

UK, Rugby
Tel: +44 1788 563 563

USA, Pittsburgh
Tel: +1 412 967 0765

The revolution starts here

If you work in a large-scale oil and gas production environment you’ll already know just how challenging it can be – and expensive – when you’re hit by an unplanned production stoppage.

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High power induction motor
Built on long-term experience

GE’s groundbreaking technology that can integrate in a unique combination with our advanced VSI drive – in operation at GE’s full load test bench facility in Massa, Italy. VSI is proven, high power drive solution – already extensively validated for high power needs using GE’s 61MW synchronous motor.

Why less is more
Induction motor technology delivers greater reliability and efficiency primarily by reducing the rotor’s parts from more than 140 to around 30. It means a leaner, low-maintenance motor that consistently delivers the high power you need.

GE’s success in the engineering and development of large, high power induction motors for compression duties will be a world first and builds on our extensive experience in smaller induction units.

The induction motor advantage at a glance

<table>
<thead>
<tr>
<th></th>
<th>Uptime</th>
<th>Weight Reduction</th>
<th>Footprint Reduction</th>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>+48%</td>
<td>-17%</td>
<td>-36%</td>
<td></td>
<td>98.1%</td>
</tr>
</tbody>
</table>

Based on comparison study with equivalent 80MW synchronous motor

Greater availability Ideal for the typical five-year run time of large liquefaction units
Lower capex Thanks to a smaller motor requiring smaller foundations
Lower opex Easier installation and maintenance plus more efficient speed ranges

GE’s advanced high power motor/VSI solution adds up to:

It means you can benefit from an enhanced total system for compressor train processes enabling larger speed ranges delivered by smaller, less power-hungry compressors.

As a single source supplier we offer:
• The convenience of one point of contact
• Direct, easy access to both electrical and mechanical expertise
• Tailor-made support to reduce complexity and enhance solutions
• Simpler, faster integration
• Proven, trusted systems – fully tested in demanding environments
• Reduced risk – adding more value to your operations

GE is the only company in the world offering the technologies of high power induction motors, VSI drive and compressor manufacturing capabilities delivering real value with advanced, integrated solutions.

All together now
Your integrated mechanical and electrical solution for motor, drive and compressor

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